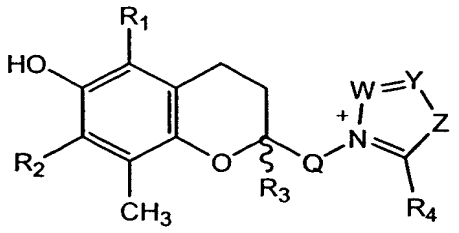
What is claimed:

1. A compound of formula I:



wherein:

W and Y are independently N, CR^W or CR^Y ;

Z is O, S or NR^Z,

Q is $-CH_2-$ or $-C(O)-CH_2-$, where the methylene is bonded to a ring nitrogen;

R^W and R^Y are independently hydrogen, alkyl, $-C{=}CR^E$, $-CH_2-C{=}CR^P$, alkenyl, aryl, arylalkyl, aryloxy, arylthio, amino, alkylamino, arylamino, dialkylamino, diarylamino, CH_3 C(O)NH--, fluoroalkyl, perfluoroaryl, hydroxyalkyl, $C(O)NH_2$, or $S(O)_2$ NH_2 or, together with their ring carbon atoms form a fused 6-membered aromatic or heteroaromatic ring, wherein R^E or R^P is alkyl, hydrogen, hydroxyalkyl or aryl;

R^Z is alkyl, $-CH_2C{=}CR^P$, aryl, arylalkyl, or aroylalkyl;

R^1 and R^2 are independently hydrogen, alkyl or hydroxymethyl;

R^3 is hydrogen or methyl;

R^4 is acetamido, hydrogen, methyl, amino, $-C{=}CR^E$, $-CH_2C{=}CR^P$, alkylthio, fluoromethyl, difluoromethyl, trifluoromethyl, cyanomethyl, hydroxyalkyl, alkoxycarbonyl-methyl, 1-(alkoxycarbonyl)-1-hydroxyalkyl or aminocarbonylmethyl;

aryl is a C_6 or C_{10} aromatic ring, optionally substituted as set forth below, or a 5- or 6-membered heteroaromatic (heteroaryl) ring containing at least one and up to three atoms of N for the 6-membered heteroaryl ring and from one to three atoms of N or one atom of O or S and zero to two atoms of N for the 5-membered heteroaryl ring; each heteroaromatic ring can be substituted with up to two amino-, dialkylamino-, pyrrolidin-1-yl, piperidin-1-yl, morpholin-4-yl, thiamorpholin-4-yl, 4-(aryl)piperidin-1-yl, 4-(aryl)piperazin-1-yl- (said aryl group being C_6 or C_{10} and optionally substituted as described below), halo or

alkylenedioxy groups, or fused to a substituted benzene, pyridine, pyrimidine, pyridazine or triazine ring, and wherein said heteroaromatic rings can be additionally substituted;

said C_6 or C_{10} aromatic rings can be additionally substituted with acylamino, acyloxyalkyl, alkanoyl, alkanoylalkyl, alkenyl, alkoxy, alkoxycarbonyl, alkoxycarbonylalkyl, alkyl, alkylamino, (C_1 -C_3)-alkylenedioxy, alkylsulfonyl, alkylthio, allyl, amino, benzoyl, carboxy, carboxyalkyl, cyano, cycloalkyl, dialkylamino, halo, fluoromethyl, difluoromethyl, trifluoromethyl, hydroxy, (C_1 -C_6)-hydroxyalkyl, mercapto, nitro, phenoxy, phenyl, phenylalkyl, sulfamoyl, sulfo (-SO_3 H), aminosulfonyl (H_2 NSO_2-), phenylsulfonyl, or phenylsulfinyl;

said heteroaromatic rings can be additionally substituted with acylamino, alkanoyl, alkoxy, alkoxycarbonyl, alkoxycarbonylalkyl, alkyl, alkylamino, alkylsulfonyl, alkylthio, amino, arylsulfonyl, benzoyl, carboxy, cyano, dialkylamino, halo, fluoroalkyl, hydroxy, mercapto, nitro, phenyl, phenoxy, pyrrolidin-1-yl, piperidin-1-yl, 4-arylpiperidin-1-yl, morpholin-4-yl, 4-arylpiperazin-1-yl, sulfamoyl, fluoromethyl, difluoromethyl, or trifluoromethyl;

the halo atoms are fluoro, chloro, bromo or iodo; and

X- is a pharmaceutically acceptable anion;

or pharmaceutically acceptable acid addition salts of said compounds.

2. The compound of claim 1, wherein anion X- is chloride, bromide, mesylate, tosylate, brosylate, mesitylene sulfonate, fumarate, maleate or acetate.

3. The compound of claim 1 wherein:

R^W and R^Y are independently hydrogen, alkyl, aryloxy, arylthio, amino, alkylamino, dialkylamino, $CH_3C(O)NH$-, fluoroalkyl, perfluoroaryl, or hydroxyalkyl or, together with their ring carbon atoms form a fused 6-membered aromatic or heteroaromatic ring;

R^1 and R^2 are methyl;

aryl is a C_6 or C_{10} aromatic ring, optionally substituted as set forth below, or a 5- or 6-membered heteroaromatic (heteroaryl) ring containing at least one and up to three atoms of N for the 6-membered heteroaryl ring and from one to three atoms of N or one atom of O or S and zero to two atoms of N for the 5-membered heteroaryl ring; each heteroaromatic ring can

be substituted with up to two amino-, dialkylamino-, pyrrolidin-1-yl, piperidin-1-yl, morpholin-4-yl, thiamorpholin-4-yl, 4-(aryl)piperidin-1-yl, 4-(aryl)piperazin-1-yl- (said aryl group being C_6 or C_{10} and optionally substituted as described below), halo or fused to a substituted benzene ring, and wherein said heteroaromatic rings can be additionally substituted;

said C_6 or C_{10} aromatic rings can be additionally substituted with acylamino, acyloxyalkyl, alkanoyl, alkanoylalkyl, alkenyl, alkoxy, alkoxycarbonyl, alkoxycarbonylalkyl, alkyl, alkylamino, (C_1 -C_3)-alkylenedioxy, alkylsulfonyl, alkylthio, allyl, amino, benzoyl, carboxy, carboxyalkyl, cycloalkyl, dialkylamino, halo, fluoromethyl, difluoromethyl, trifluoromethyl, hydroxy, (C_2 -C_6)-hydroxyalkyl, mercapto, nitro, phenoxy, phenyl, phenylalkyl, sulfamoyl, sulfo, aminosulfonyl, phenylsulfonyl, or phenylsulfinyl;

said heteroaromatic rings can be additionally substituted with acylamino, alkanoyl, alkoxy, alkoxycarbonyl, alkoxycarbonylalkyl, alkyl, alkylamino, alkylsulfonyl, alkylthio, amino, arylsulfonyl, benzoyl, carboxy, dialkylamino, halo, fluoralkyl, hydroxy, mercapto, nitro, phenyl, phenoxy, pyrrolidin-1-yl, piperidin-1-yl, 4-arylpiperidin-1-yl, morpholin-4-yl, 4-arylpiperazin-1-yl, sulfamoyl, fluoromethyl, difluoromethyl or trifluoromethyl; and

the halo atoms are fluoro, chloro or bromo.

4. The compound of claim 3, wherein:

W and Y are CR^W and CR^Y, respectively;

Z is S, and the compounds are thiazolium salts; and

R^4 is acetamido, hydrogen, methyl, amino, alkylthio, fluoromethyl, difluoromethyl or trifluoromethyl.

5. The compound of claim 3, wherein:

W is N and Y is CR^Y ;

Z is S, and the compounds are [1,3,4]-thiadiazolium salts;

R^Y is hydrogen, alkyl, aryloxy, arylthio, amino, alkylamino, dialkylamino, fluoroalkyl, perfluoroaryl, or hydroxyalkyl; and

R^4 is acetamido, hydrogen, methyl, amino, alkylthio, fluoromethyl, difluoromethyl or trifluoromethyl.

6. The compound of claim 3, wherein:

R^4 is hydrogen, methyl, amino, alkylthio, fluoromethyl or difluoromethyl.

7. The compound of claim 6, wherein Q is $-C(O)CH_2-$.

8. The compound of claim 7, wherein:

W is N and Y is CR^Y ; and

Z is O and the compounds are [1,3,4]-oxadiazolium salts; and

R^Y is hydrogen, alkyl, aryloxy, arylthio, amino, alkylamino, dialkylamino, fluoroalkyl, perfluoroaryl, or hydroxyalkyl.

9. The compound of claim 7, wherein:

W is N and Y is CR^Y ;

Z is NR^Z and the compounds are [1,2,4]-triazolium salts; and

R^Y is hydrogen, alkyl, aryloxy, arylthio, amino, alkylamino, dialkylamino, fluoroalkyl, perfluoroaryl, or hydroxyalkyl.

10. The compound of claim 7, wherein

W and Y are CR^W and CR^Y, respectively; and

Z is NR^Z, and the compounds are imidazolium salts.

11. The compound of claim 7, wherein:

W is CR^W and Y is N;

Z is S and the compounds are [1,2,4]-thiadiazolium salts; and

R^W is hydrogen, alkyl, aryloxy, arylthio, amino, alkylamino, dialkylamino, fluoroalkyl, perfluoroaryl, or hydroxyalkyl.

12. The compound of claim, wherein Qis $-CH_2-$.

13. The compound of claim 12, wherein:

W is N and Y is CR^Y ;

Z is O and the compounds are [1,3,4]-oxadiazolium salts; and

R^Y is hydrogen, alkyl, aryloxy, arylthio, amino, alkylamino, dialkylamino, fluoroalkyl, perfluoroaryl, or hydroxyalkyl.

14. The compound of claim 12, wherein:

W is N and Y is CR^Y ;

Z is NR^Z and the compounds are [1,2,4]-triazolium salts; and

R^Y is hydrogen, alkyl, aryloxy, arylthio, amino, alkylamino, dialkylamino, fluoroalkyl, perfluoroaryl, or hydroxyalkyl.

15. The compound of claim 12, wherein:

W and Y are CR^W and CR^Y, respectively; and

Z is NR^Z, and the compounds are imidazolium salts.

16. The compound of claim 12, wherein:

W is CR^W and Y is N;

Z is S and the compounds are [1,2,4]-thiadiazolium salts; and

R^W is hydrogen, alkyl, aryloxy, arylthio, amino, alkylamino, dialkylamino, fluoroalkyl, perfluoroaryl, or hydroxyalkyl.

17. The compound of claim 1, wherein :

Q is $-C(O)-CH_2-$ and:

W and Y are $C(CH_3)$;

Z is S;

each of R^1, R^2, and R^3 is CH_3, or R^1 and R^3 are CH_3 and R^2 is H; and

R^4 is H or CH_3.

18. The compound of claim 1, wherein:

Q is $-C(O)-CH_2--$ and:

W is N, Y is $C(CH_3)$;

Z is S;

each of R^1, R^2, and R^3 is CH_3, or R^1 and R^3 are CH_3 and R^2 is H; and
R^4 is H or CH_3.

19. The compound of claim 1, wherein
Q is -C(O)CH_2- and:
W is N and Y is C(CH3);
Z is N-C_6H_5 ;
each of R^1, R^2, and R^3 is CH_3, or R^1 and R^3 are CH_3 and R^2 is H; and
R^4 is H.

20. The compound of claim 1, wherein:
Q is -C(O)-CH_2 -and:
W is N and Y is C(CH_3);
Z is N-CH_3 ;
R^1 and R^3 are CH_3 and R^2 is H; and
R^4 is H.

21. The compound of claim 1, wherein
Qis -CH_2 - and:
W and Y are C(CH_3);
Z is S;
each of R^1, R^2, and R^3 is CH_3, or R^1 and R^3 are CH_3 and R^2 is H; and
R^4 is H or CH_3.

22. The compound of claim 1, wherein
Q is -CH_2- and:
W is N, Y is C(CH_3);
Z is S;
each of R^1, R^2, and R^3 is CH_3, or R^1 and R^3 are CH_3 and R^2 is H; and
R^4 is H or CH_3.

23. The compound of claim 1, wherein

Q is $-CH_2-$ and:

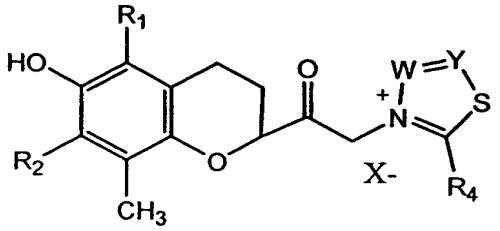
W is N and Y is $C(CH_3)$;

Z is $N-C_6H_5$;

each of R^1, R^2, and R^3 is CH_3, or R^1 and R^3 are CH_3 and R^2 is H;

R^4 is H.

24. A compound having the formula:



wherein

W is CR^W ;

Y is CR^Y ;

R^W and R^Y are independently hydrogen or alkyl;

R^1 and R^2 are independently hydrogen, alkyl or hydroxymethyl;

R^4 is acetamido, hydrogen, methyl, or amino; and

X- is a pharmaceutically acceptable anion;

or pharmaceutically acceptable acid addition salt of said compound.

25. The compound of claim 24, wherein:

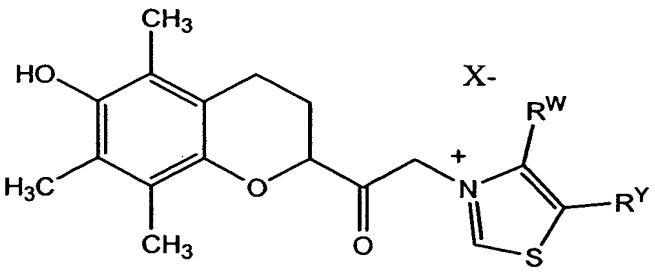
R^W and R^Y are each alkyl;

R^1 and R^2 are each, alkyl; and

R^4 is hydrogen.

26. The compound of claim 25, wherein R^W , R^Y , R^1 and R^2 are each, methyl.

27. A method of decreasing intraocular pressure in an animal, including a human, comprising administering an intraocular pressure decreasing amount of a compound having the formula:



wherein:

R^W and R^Y are independently hydrogen or alkyl; and

X- is a pharmaceutically acceptable anion;

or pharmaceutically acceptable acid addition salts of said compounds to said subject.

28. The method of claim 27, wherein anion X- is chloride, bromide, mesylate, tosylate, brosylate, mesitylene sulfonate, fumarate, maleate or acetate.

29. The method of claim 27, wherein R^W and R^Y are methyl.

30. The method of claim 29, wherein X- is chloride.